

CENTRAL INTELLIGENCE AGENCY

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The inspection commissions which frequently visited the plant always wore the uniform of the Soviet Air Force.

b. Labor: In 1945, 600 PWs; in 1948 only 400 PWs were there. Five to six thousand Soviets, 40 percent women, working in one day-shift; 500 to 600 persons (40 percent women) in the second and third shift.

4. Production:

a. Until the middle of 1947 the following aircraft engines were produced: In-line engine: 1.5 meters long 0.6 meters wide, 1.10 meters high. Carburetor engine with 12 vertical cylinders, in two rows of six each. 25X1

estimated power at 1,200 to 1,500 hp in comparison with German aircraft engines. Production figures were unknown. Shipments were made at night, destination unidentified.

b. After the middle of 1947 the plant was converted to manufacture aircraft turbines. The turbine construction was still in the experimental stage. The series production was not yet started. Length of turbine: 2.25 meters, diameter: 0.90 meters, jacket: light metal. in the foundry. 25X1

a description of two component parts which were made there:

(1) First part: Cap for turbine jacket. Building material: light metal, lower diameter: 0.90 meters, upper diameter: 0.80 meters, height (approximate): 30 cm. In the upper diameter three continuous struts, crossing in the center, 3 cm thick.

(2) Second part: Blade built into the turbine (statement of a Soviet workman). Material: steel, plate: 80 x 80 mm, 20 mm thick, elliptical blade: 200mm long, 40 mm wide, 5 mm thickest part, sharp side edges. Of these parts about 100 in number in each mechanical workshop (see sketch 2). In the foundry was also a large number of these blades. 25X1

5. Security:

The plant had eight watch towers manned by armed civilians. There were also four sentry towers, manned by MVD-soldiers, around the plant.

The area was enclosed by a solid wall on the north and wooden planks on the other sides.

Comment:

The manufacture of V-engines (presumably AM-38/39) in aircraft engine factory 45 in Moscow up to the middle of 1947 is confirmed.

The beginning of the conversion to turbo-jet units seems to date back as early as the fall of 1946, as is inferred from various other reports. It is also possible that, in the early stage of this kind of work, there was only assembly and general overhaul of short-term checkup of OC4-jet units and that the manufacture proper started as late as 1947. 25X1

The new constructions mentioned in the report which were new buildings in early 1948 have been confirmed.

called them buildings for turbo-jet test stands. Actually, however, it was only the conversion or extension work in the plant of which, at the close of the war, only a quarter

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was in operation. All reports received up to now regarding the turbines manufactured there, as well as the indications on sketch 2, lead to the conclusion that the turbo-jet units built there are copies of JULIO 004 both as to general design and power.

2 Annexes: 2 blueprints, Aircraft Engine plant No. 45 in Moscow.

Legend:

- 1 Mechanical section, new mechanical equipment
- 2 Central administration
- 3 Mechanical section
- 4 New building
- 5 Foundry, one electric furnace for steel casting, 4 meters high, 2½ meters in diameter. Four furnaces with coke firing for light metal casting, traveller with slewing crane for crucibles.
- 6 Steam forge with six steam hammers and six oil-fueled hearths.
- 7 Mechanical section
- 8 Test stands; the two sections were enlarged to the north
- 9 Boilerhouse with six steam-boiler plants, two of which are in continuous operation, one smokestack
- 10 Four coal bunkers
- 11 Stores for material
- 12 Mechanical section
- 13 Scrap yard
- 14 Coal storage yard
- 15 Plant area covered with unidentified buildings.

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